

Water Works – Teacher Pre-visit information

Concepts

Water can affect everything from the efficiency of our buildings to the stability of our landscapes. This field trip uses hands-on demonstrations to explore where water comes from and what effects it has on earth as it moves through the water cycle.

Program Activities

The indoor portion of the field trip shows how important water is. Every plant and animal depends on water for survival! Students will also see evidence of the natural movement of water through a water cycle demonstration.

The outdoor hike will focus on how different landscapes affect water's natural ability to cycle. Students will also see the effects of rainwater with different types of vegetation using the models of streamside landscapes.

Pre-visit Suggestions

Read *The Water Hole* by Graeme Base

Read *The Snowflake : A Water Cycle Story Hardcover* – by Neil Waldman

Watch and discuss *The Magic School Bus At The Waterworks* DVD by Joanna Cole

Vocabulary

Conserve - to use or manage (natural resources) wisely; preserve; save

Mitigate – to make less severe

Impact – influence; effect

Erosion – the process by which the surface of the earth is worn away by the action of water, glaciers, winds, waves, etc.

Collect – to gather together; assemble:

Condensation – the process of reducing a gas or vapor to a liquid or solid form.

Evaporation – to change from a liquid or solid state into vapor

Precipitation – falling products of condensation in the atmosphere, as rain, snow, or hail.

Buffer – a thing that lessens the impact of a shock



Howard County
RECREATION & PARKS

Robinson Nature Center
6692 Cedar Lane, Columbia, MD 21044
www.howardcountymd.gov/RobinsonNatureCenter.htm
410-313-0400



Water Works – Teacher Post-visit information

Dear Teacher,

We hope you enjoyed your recent field trip to the Robinson Nature Center. To help with follow-up in the classroom, we have developed the following post-visit materials:

- 1) Follow-up discussion
- 2) Follow-up activities

Follow-up Discussion

- 1) Review the difference between total water on the planet and usable water.
 - a. 71% of our Earth is covered with water.
 - b. Only a drop is usable out of 1000mL. (about 0.003%)
- 2) Our fresh water is very limited. How do we manage it properly?
 - a. Create more pervious pavement areas, riparian buffers, rain gardens, rain barrels, and green roofs.
 - b. Conserve it, don't waste it!
 - c. Try to stop erosion.
- 3) What depends on water?
 - a. All living things, all plants and animals, us included!

Follow-up Activities

Water Words

- Have students collect and bring in magazine or printed pictures that show water habitats.
- Ask students to think of some way they have used water today.
- Using an empty chalkboard/whiteboard ask students to (as a class) come up with 100 words that have something to do with water.
- Using the list of words, ask students to create a word tree of water-related words.
- Have students create poetic definitions of water that start with "Water is....." Have them write the statement on various shades of blue construction paper. They can add their pictures they brought in and their word trees to this construction paper if they want. Display them on a wall or window. Arrange the artwork into the shape of a drop of water.